



**REMARKS**

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**TC 1700**

In response to the above-identified Office Action, Applicants amend the application and seek reconsideration thereof. In this response, Applicants elect to continue prosecution with claims 1-15, 21 and 25-29. Applicants cancel claims 10-20 and 22-24 and add new claims 30-115. Accordingly, claims 1-9, 21 and 25-115 are pending.

Attached hereto is a marked-up version of the changes made to claims by the current amendment. The attachment is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

**I.      Restriction**

Restriction is required under 35 U.S.C. § 121 and § 372. The inventions are listed as Groups I-III where Group I comprises claims 1-15, 21 and 25-29; Group II comprises claims 16-20; and Group III comprises claims 22-24. The Examiner states that the inventions listed as Groups I-III and do not relate to a single general inventive concept under PCT Rule 13.1. In response, Applicants elect Group I without traverse.

**II.     Specification**

The Examiner states that the application does not contain an abstract of the disclosure as required by 37 C.F.R. § 1.72(b). In response attached hereto on a separate sheet is an Abstract of the present invention.

**III.    Claim Objections**

Claims 1-9 are objected to because the language of claims 1 and 7 include informalities. Claims 1 and 7 have been amended to incorporate the suggestions of the Examiner to overcome these objections. Namely, claims 1 and 7 have been amended to include the term "by weight" to clarify the percentage types. Accordingly, reconsideration and withdrawal of the objections to claim 1 and 7 are requested.

Claims 10-15, 21 and 25-29 are objected to under 37 C.F.R. § 1.75(c) as being in an improper form because a multiple dependent claim cannot depend from another multiple dependent claim. Applicants have canceled claims 10-15. Accordingly, reconsideration and withdrawal of the objection to claims 1-9 are requested.

New claims 30-110 have been drafted to replace the multiple dependent claims canceled. Thus, independent claim 30 and its dependent claims, independent claim 51 and its dependent claims, independent claim 71 and its dependent claims and independent claim 92 and its dependent claims correspond to original claims 10, 12, 13 and 15, respectively. Claims 21 and 25-29 have been amended to correct dependencies in light of the restructured claim set. Accordingly, reconsideration and withdrawal of the objections to claims 21 and 25-29 are requested.

#### **IV. Claim Rejections Under 35 U.S.C. § 112, second paragraph**

Claims 4-6 and 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In regard to claims 4 and 5, these claims have been amended to reflect proper use of Markush Group terminology. Also, the term “optionally” has been removed from both claims. Accordingly, reconsideration and withdrawal of the indefiniteness rejection of claims 4 and 5 are requested.

In regard to claim 6, the phrase “preferrably polyethers with a molecular mass of between 200,000 and 1,000,000 ” has been removed from the claim. This element of the claim has been redrafted as dependent claim 114 without the term “preferrably”. Thus, the term “preferrably” has been removed from claim 6 and the claim is no longer indefinite as to its scope. Accordingly, reconsideration and withdrawal of the rejection of claim 6 is requested.

In regard to claim 8, the phrase “composed in particular of active charcoal, inorganic particles or metallic particles” has been removed from the claim. This phrase without the term “in particular” has been used to draft dependent claim 115. Thus, claim 8 no longer includes the term

“in particular” and is now definite as to its scope. Accordingly, reconsideration and withdrawal of the indefiniteness rejection of claim 8 are requested.

**V. Claims Rejected Under 35 U.S.C. § 102**

Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,407,096 issued to Landi, hereinafter (“Landi”). Applicants respectfully disagree for the following reasons.

The Examiner has failed to make a prime facie case for anticipation. The Examiner must show that the cited reference teaches every element of the claim. In regard to claim 1, Landi describes a composite porous sheet composed of polymer and fillers in proportions between 50% and 98%. Landi, column 2, lines 62-64. Landi further teaches the mixture of polymethyl methacrylate with a polytetrafluoroethylene dispersion and a conductive filler that must be milled. Landi, col. 1, lines 40-45. This leads to the transformation of the polytetrafluoroethylene particles in an elongated fibrils network. Landi, col. 1, line 54. Thus, it is clear that the product obtained in Landi is a fibrillated product and therefore it has a *discontinuous structure*. However, claim 1 of the present invention clearly states that that the porous composite has a homogeneous structure. Claim 1, line 1. Thus, one of ordinary skill in the art reading claim 1, in light of the specification, would understand that the porous composite is a *continuous structure* as implied by the term “homogeneous structure”. See also page 5, lines 18-22 and page 9, lines 14-15.

This difference is essential because it advantageously gives some mechanical properties to the product such as tensile strength at break. See page 7, lines 4-6 and Table, on page 17. Thus, the present invention is resistant and can be formed in a thin widened film that avoids the use of a support. See page 9, lines 18-21. Therefore, Landi does not teach or suggest a porous composite without a homogeneous structure. Accordingly, reconsideration and withdrawal of the anticipation rejection of claim 1 are requested.

In regard to claims 2-8, these claims depend from claim 1 and incorporate the limitations thereof. Thus, claims 2-8 are not anticipated by Landi, at least for the reasons given in regard to claim 1. Accordingly, reconsideration and withdrawal of the rejection of claims 2-8 are requested.

New claims 30-110 include independent claims 30, 51, 71 and 92 and related dependent claims 31-50, 52-70, 72-91 and 92-110. Each of these independent claims include the limitation “homogeneous structure.” Thus, at least for the reasons mentioned in regard to claim 1 as relating to this limitation, claims 30-110 are not believed anticipated by or obvious over Landi. Also, the independent claims 30, 51, 71 and 92 include elements not disclosed in the prior art such as the amount of fillers in the porous composite product comprised between 30 and 85% by weight, the BET specific surface of the product greater than 10 m<sup>2</sup>/g, the product in the form of a film and the product in the form of granules. Further, new claims 111-115 depend from claim 2 and incorporate the limitations thereof. Thus, claim 111-115 are not believed to be anticipated or obvious over Landi at least for the reasons mentioned in regard to claim 1.

## **VI. Claim Rejections Under 35 U.S.C. § 103**

Claim 9 is rejected under 35 US.C. § 102(b) as being anticipated by or in the alternative under 35 U.S.C. 103(a) as obvious over Landi. Claim 9 depends from claim 1 and incorporates limitations thereof. Thus, claim 9 is not anticipated by Landi, at least for the reasons mentioned in regard to claim 1. Further, Landi teaches away from a porous composite with a homogeneous structure as discussed in regard to claim 1. Therefore, Landi does not render a porous composite with a homogeneous structure obvious. Accordingly, reconsideration and withdrawal of the rejection of claim 9 are requested.

## **CONCLUSION**

In view of the foregoing, it is believed that all claims now pending, namely claims 1-9, 21, 25-115 patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner

believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800. If there are any additional fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666.

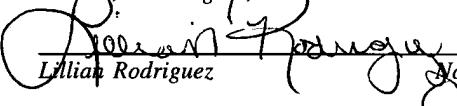
Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: November 16, 2001 By:   
Eric S. Hyman, Reg. No. 30,139

**CERTIFICATE OF MAILING:**

I hereby certify that this correspondence is being deposited with sufficient postage as First Class Mail with the United States Postal Service in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on November 16, 2001.

 Lillian Rodriguez

11-16-01

November 16, 2001

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025  
(310) 207-3800



VERSION MARKED TO REFLECT CHANGES

IN THE CLAIMS

1. [Amended] Porous composite product with a homogeneous structure, characterized in that it is formed of a polymeric material and at least 20% by weight of one or more fillers and in that the said product is capable of being obtained by extrusion.
4. [Amended] Composite product according to claim 1, characterized in that the polymeric material comprises elastomers or polymers [chosen] selected from the group consisting of polyolefins [, which are optionally fluorinated], acrylic polymers, aromatic polymers, polyamides, polyimides, and vinyl polymers with a high proportion of ethyl monomers [and optionally thermoplastic polymers or elastomers, soluble in polar organic solvents or water, which remain after the implementation of the manufacturing process].
5. [Amended] Composite product according to claim 4, characterized in that the polymeric material comprises elastomers or polymers [chosen] selected from the group consisting of polyethylenes, polypropylenes[,] and ethylene- $\alpha$ -olefin copolymers [and optionally thermoplastic polymers or elastomers, soluble in polar organic solvents or water, which remain after the implementation of the manufacturing process] .
6. [Amended] Composite product according to claim 4 [and] or 5, characterized in that the thermoplastic elastomers, soluble in polar organic solvents or water, which remain after the implementation of the manufacturing process are chosen from polyethers, poly(vinyl alcohol)s or ethylene-vinyl alcohol copolymers [, preferably polyethers with a molecular mass of between 200,000 and 1,000,000].

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7. [Amended] Composite product according to claim 6, characterized in that the composite product comprises :

- 10 to 40% by weight of polyolefin,
- 5 to 40% by weight of polyether,
- fillers, [q.s.] sufficient quantity for 100% by weight.

8. [Amended] Composite product according to claim 1, characterized in that the filler is chosen from fillers with a high specific surface [, composed in particular of active charcoal, inorganic particles or metallic particles].

21. [Amended] Extruded composite precursor product [of use in particular in carrying out the process according to one of claims 16 to 19], comprising one or more insoluble polymers, one or more other soluble or calcinable polymers and one or more fillers, in particular with a high specific surface.

25. [Amended] Application of the composite products according to either of claims [13] 71 or [14] 90 for the electrochemical storage of energy.

26. [Amended] Application of the composite products according to either claims [13] 71 or [14] 90 for packaging or insulation.

27. [Amended] Application of the composite products according to claims[s 1 to 12 and 15] 92 for selective filtration.

28. [Amended] Application of the composite products according to either of claims [13] 71 or [14] 90 for electrorodialysis or capacitive deionization processes.

29. [Amended] Application of the composite products according to either of claims [13] 71 or [14] 90 for the electrolysis process.